UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/753,867	01/02/2001	Edward C. Guerrero JR.	5500-64900	1985

7590 01/13/2004

Robert C. Kowert
Conley, Rose & Tayon, P.C.
P.O. Box 398
Austin, TX 78767-0398

EXAMINER	
DANG, KHANH NMN	
ART UNIT	**PAPER NUMBER**
2111	5

DATE MAILED: 01/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/753,867	GUERRERO ET AL.	
	Examiner	Art Unit	
	Khanh Dang	2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 October 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

With regard to claims 12 and 39 (note that in the last Office Action, claim 38 was erroneously referred to) , the phrase, " to choose a low power request" cannot be ascertained because "none of the devices are [sic] present." Note that in claim 1, "one or more devices configured to assert a voltage request."

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 11-21, 30-32, and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Voegeli et al. (6,448,672).

It is first noted that similar claims will be grouped together to avoid repetition in explanation.

As broadly drafted, these claims do not define any structure/step that differs from Voegeli et al. With regard to claim 1, Voegeli et al. discloses a computer system, comprising: one or more devices (10) configured to assert a voltage request; an arbiter (4) configured to receive a plurality of voltage requests asserted by a plurality of the one or more devices (10), to choose a chosen voltage request and to output the chosen voltage request to one or more power supplies (6); and the one or more power supplies (6), wherein each of the one or more power supplies (6) is configured to receive the chosen voltage request and to provide a chosen voltage that corresponds to the chosen voltage request to one or more of the one or more devices (10). With regard to claim 2, see at least col. 3, lines 42-64. With regard to claims 3 and 31, see at least Fig. 7 and description thereof. With regard to claim 4, it is clear from Voegeli et al. that if only one request, the arbiter (controller) will select that one request without arbitration. With regard to claims 5 and 32, the arbiter (controller), of course, can be configured to choose a highest voltage request (the preferred rail voltage (max voltage) requested by device (10) and indicated by voltage control parameter). With regard to claims 11 and 38, see at least claim 18. With regard to claims 13 and 40, it is, as a matter of course, that the arbiter (controller) has to select that one request from only one device. With regard to claim 14, see col. 5, lines 30-35. With regard to claim 15, see at least Fig. 7. With regard to claim 16, see at least col. 7, lines 36-40. With regard to claims 17-21, 27-29, one using the system of Voegeli et al. would have performed the same steps set forth in claims 17-21 and 27-29.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6-8, 22-24, 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voegeli et al.

Voegeli et al. discloses the claimed invention except the use of a « low power signal" to indicate whether the device(s) (10) should be placed in sleep or idle mode. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the device of Voegeli et al. with such a "low power signal," since the Examiner takes Official Notice that placing a device under sleep or idle mode using an low power indicative signal is old and well-know in the computer art for the purpose of saving operating power or energy. If Applicants challenge the fact that the use of sleep or idle mode is old and well know, supportive document(s) either provided below or will be provided upon request.

Claims 9, 10, 25, 26, 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voegeli et al.

Voegeli et al. discloses the claimed invention except the use of an indicative signal to indicate whether the power supply or voltage regulator functions properly. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the device of Voegeli et al. with such an indicative signal, since the Examiner takes Official Notice that using an indicative signal (provided by a voltage detector, for example) to indicate whether the power supply or voltage regulator functions properly is old and well-know in the computer art for the purpose of preventing damage to the device/system from voltage surge, for example. If Applicants challenge the fact that the use of such indicative signal (discussed above) is old and well know, supportive document(s) either provided below or will be provided upon request.

Response to Arguments

Applicant's arguments filed 10/17/2003 have been fully considered but they are not persuasive.

At the outset, Applicants are reminded that claims subject to examination will be given their broadest reasonable interpretation consistent with the specification. *In re Yamamoto*, 740 F2.d 1569, 1571, 222 USPQ 934, 936 (Fed. Cir. 1984). In fact, "an examiner has the duty to police claim language by giving it the broadest reasonable interpretation." *Springs Window Fashions LP v. Novo Industries, LP.*, 65 USPQ2d 1826, 1830 (Fed. Cir. 2003). Applicants are also reminded that claimed subject matter not the specification, is the measure of the invention. Disclosure contained in the specification

can not be read into the claims for the purpose of avoiding the prior art. *In re Sporck*, 55 CCPA 743, 386 F.2d, 155 USPQ 687 (1986).

With this in mind, the discussion will focus on how the terms and relationships thereof in the claims are met by the references. Response to any limitations that are not in the claims or any arguments that are irrelevant and/or do not relate to any specific claimed language will not be warranted.

The 112 2nd paragraph Rejection:

It is still not ascertained what may be the subject matter of claims 12 and 39. The phrase, "to choose a low power request" (claims 12 and 39) if "none of the devices are [sic] present" cannot be ascertained. Note that in claim 1 and 30 (which claim 12 and 39 respectively depend from), "one or more devices configured to assert a voltage request." From claim 1 and 30, It is clear that at least one device has to be present to make a voltage request. If none of the devices is present then there will be no request from them. Therefore, the arbiter has no request to select.

The Voegeli et al. 102(e) Rejection:

With regard to claims 1-5, 11-20, 30-32 and 40, Applicants argued that "Voegeli does not teach that if any of the voltage requests asserted by the devices specify a voltage that is distinct from the voltage specified by any other of the voltage requests asserted by the devices ... same voltage supply" (Applicants' remarks, page 10). Contrary to Applicants' argument, in Voegeli et al., the power system

controller or "arbiter" 4 determines the power supply requirement parameters by first obtaining one or more module identification parameters from the modules or "devices" 10. The controller or "arbiter" 4 may then look up the corresponding power supply requirement parameters in a lookup table located on a ROM, for example, or in system RAM. Alternatively, the power system controller or "arbiter" 4 may retrieve power supply requirement parameters for each attached electronic circuit or module or "device" 10 using communications bus 12, such as an I2C bus. Power supply requirements provide the power system controller or "arbiter" 4 with power-on requirements of each electronic circuit or module or "device" 10 attached to power bus 8. Thus, power supply requirement parameters may be determined from the module identification parameter corresponding to each attached module or "device" 10 or may be provided directly by the modules or "devices" 10. The controller or "arbiter" 4 obtains power-on requirements corresponding to each attached electronic circuit 10.
The power-on requirements provide the controller or "arbiter" 4 with enough information to power the electronic circuit 10, such as a module identification number, voltage control parameter, turn-on sequencing control parameter, voltage delta control parameter, and a time delta control parameter. The voltage control parameter indicates the preferred rail voltage (i.e., max voltage requested by a module or "device" 10) of a electronic circuit 10 per conducting line within a bus 8. And in Voegeli et al., multiple modules or "devices" have different requirements and voltage demands/requests. Thus, it is clear at least one voltage request is distinct from other requests from other modules or "devices." It is also clear that the controller or arbiter 4

will then choose at least one voltage which is the same or meets the voltage demand requested by at least one device when no conflicts occur. In any event, the fact that Voegeli et al. discloses more than what is claimed (for example, to resolve a conflicts if occurred before voltage can be supplied) is irrelevant. The controller or "arbiter" 4 can also detect the presence/absence of the modules or "devices" 10. If the module or "device" 10 is not present, the I2C bus 12 state is logic 0, and the controller or "arbiter" 4 recognizes that a module or "device" 10 is not present. However, if the module or "device" 10 is present, the I2C bus 12 is pulled up, and the I2C bus state 12 is logic 1, indicating module or "device"10 presence.

The Voegeli et al. 103 Rejection:

With regard to claims 6-10, 22-26 and 33-39, Applicants argued that while placing the device in sleep or idled mode using a low voltage indicative signal may be well-known, using the same in Voegeli et al. is not known in the art. In response to applicants' argument that there is no motivation to provide Voegeli et al. with the sleep or idled mode using a voltage indicative signal, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the system of Voegeli et al. runs on Intel's Pentium platform

and therefore, it is clear that using a power saving mode for Intel's Platinum based computer/electronic system such as Voegeli et al.'s is old and well-known in the art.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Khanh Dang at telephone number 703-308-0211.

Khanh Dang
Primary Examiner